

AMENDMENTS TO THE CLAIMS

Claims 1-22 were pending prior to the entry of the amendments herein. Please amend Claims 12 and 22. Please cancel Claims 1-11, 13, 15 and 18. Please add new Claims 23-25.

1.-11. **(Canceled)**

12. **(Currently Amended)** A method of processing a workpiece using a semiconductor workpiece processing tool including a plurality ~~[[or]]of~~ process modules having a robot loading window and a control system on a network, the control system including a user interface, system controller, and process module controller associated with the process modules, comprising the steps of:

storing a production route defining movement of the workpiece among a number of the process modules, the production route including a number of on-line process modules defined in the production route and at least one off-line process module not included in the production route;

storing a number of recipes for processing the workpiece, the recipes each having a unique name and a number of processing parameters associated therewith;

selecting the next process module in the production route when a workpiece is substantially completed with an existing process in the production route; and

moving the workpieces among the process modules in accordance with the selecting step.

13. **(Canceled)**

14. **(Original)** The method of claim 12, wherein:

the selecting step routes the workpiece in the production route based at least in part on process module fault conditions.

15. **(Canceled)**

16. **(Original)** The method of claim 12, further comprising the step of:

a selected process module retrieving a recipe over the network based on a recipe identifier.

17. **(Original)** The method of claim 14, further comprising the step of:

a selected process module retrieving a recipe over the network based on a recipe identifier.

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18. **(Canceled)**
19. **(Original)** The method of claim 16, wherein:
the selecting step routes the workpiece to an available process module based on the production route.
20. **(Original)** The method of claim 17, wherein:
the selecting step routes the workpiece to an available process module based on the production route.
21. **(Original)** The method of claim 16, further comprising the step of:
storing process module status information; and
wherein the selecting step includes the step of using the process module status information to determine the next process module in the production route.
22. **(Currently Amended)** The method of claim 12, wherein a number of the process modules include a manual loading window, and wherein:
~~the production route includes a number of on-line process modules defined in the production route and~~ at least one off-line process module not included in the production route ~~that~~ can be configured to perform testing, maintenance or other operation while the production route is in operation.
23. **(New)** The method of claim 22, wherein the storing steps include entering information through a graphical user interface.
24. **(New)** The method of claim 22, further comprising the step of each process module controller retrieving a recipe over the network based on a recipe name.
25. **(New)** The method of claim 22, further comprising the step of performing maintenance on an off-line process module while the production route is in operation.